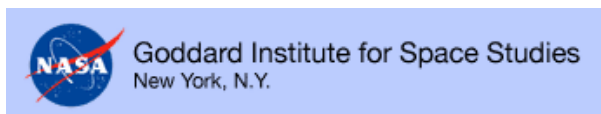


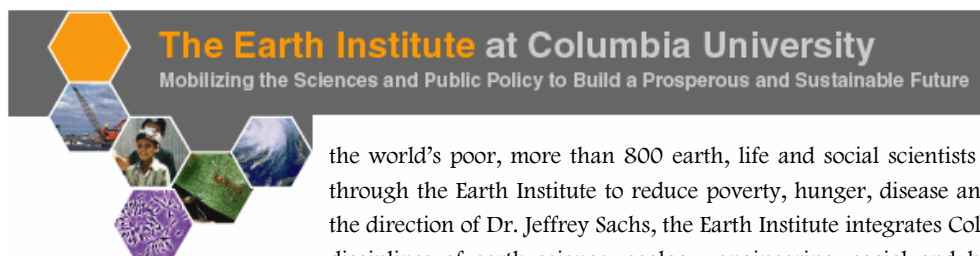
PARTNERS

The Institute on Climate and Planets (ICP) is a government, university and business partnership to open the world of earth and environmental problem-solving to students and teachers. With an idea for a Summer Research Institute, James Hansen, the Director of NASA Goddard Institute for Space Studies (GISS), envisioned giving teachers and students real roles on the lab's research teams. Together with his NASA and Columbia University colleagues, GISS contractors, Fitzgerald Bramwell, former Director of the Alliance for Minority Participation at the City University of New York, and ICP Director, Carolyn Harris, they launched the ICP in 1994.



A leading center for climate change research and improving atmospheric and climate change predictions in the 21st century, the Goddard Institute for Space Studies (GISS) is a division of the Earth Sciences Directorate (Code 900) at NASA's Goddard Space Flight Center in Greenbelt,

Maryland. GISS works cooperatively with area universities and research organizations, especially with Columbia University where the lab is located. Its science community is comprised of 150 staff, including: NASA civil servants, Columbia University researchers and students, and SGT, Inc. contract employees. SGT, Inc. is a privately held, small business, with minority ownership and 8(a) status specializing in aerospace engineering and advanced technology consulting. GISS expertise spans physics, chemistry, geology, botany, agronomy, oceanography, meteorology, computer science, and education. Research, under the direction of Dr. James Hansen, emphasizes a broad study of Global Change. This is an interdisciplinary initiative addressing natural and man-made changes in our environment that occur on various time scales and affect the habitability of our planet. GISS studies combine analyses of comprehensive global datasets, derived mainly from spacecraft observations, with global models of atmospheric, land surface, and oceanic processes. ICP is the main education outreach activity at the institute and a center for developing research education curriculum and web products. NASA recognizes ICP as one its best research training programs.



As the world's pioneer academic center for mobilizing the sciences and public policy to build a sustainable future, especially for

the world's poor, more than 800 earth, life and social scientists and engineers are working together through the Earth Institute to reduce poverty, hunger, disease and environmental degradation. Under the direction of Dr. Jeffrey Sachs, the Earth Institute integrates Columbia's full suite of strengths in core disciplines of earth science, ecology, engineering, social and health sciences. Scientists distinguish

themselves by working to understand the impact of their science, as well as to break new ground. The Institute brings this creative knowledge to bear through teaching, research and outreach in dozens of countries around the world. Jeffrey Sachs and his colleagues are committed to fostering economic growth in developing nations, while promoting human health, spurring innovation and preserving a sustainable environment. GISS is a research center in the Earth Institute. Sustaining the ICP at GISS and expanding research education within the Earth Institute is a goal of the next phase of the GISS program.

GISS ICP Research Scientists

Alternative Energy Scenarios for the 21st Century

James Hansen, NASA

Lionel Pandolfo, University of British Columbia

Storms, Clouds and Climate Warming

George Tselioudis, Columbia University

William Rossow, NASA

Anthony Del Genio, NASA

Climate Impacts in New York City and Green Roofs

Cynthia Rosenzweig, NASA

Vivien Gornitz, Columbia University

Lily Parshall, Columbia University

Global Methane and Future Climate

Elaine Matthews, NASA

Aerosols, Climate and Health

Barbara Carlson, NASA

Brian Cairns, Columbia University

Jacek Chowdary, Columbia University

Beate Leipert, Lamont Doherty Earth Observatory

Modeling the World's Oceans

Vittorio Canuto, NASA

Armando Howard, Massachusetts Institute of Technology

Ron Miller, NASA

Gavin Schmidt, Columbia University

Carbon Sequestration and Climate Change in New York

Dorothy Peteet, NASA

